Integration Note

Manufacturer:	EskomSePush
Model Number(s):	
Core Module Version:	8.7 and later.
Driver Developer:	Paul Cammidge Computer Consulting cc
Document Revision Date:	29 August 2023

Overview & Supported Features

South Africa is a fantastic country, but it has its challenges - especially concerning power availability. Since 2008, scheduled Load Shedding has been implemented to reduce the load on the national grid. EskomSePush is a popular resource for determining when your area will be without power.

This driver connects to the EskomSePush API to collect Load Shedding information. It is installed under "Input Controllers" under "Input/Output". The following information is available from the inverter:

- Minutes until Load-Shedding starts (numeric).
- Next Load-Shedding start time (text).
- Next Load-Shedding end time (text).
- Current Load-Shedding status (text).

All readings are obtained from the EskomSePush. Values reflected on the driver should correspond to the values displayed in the EskomSePush App.

Any feature not explicitly noted as supported should be assumed to be unsupported.

CONNECTION TO YOUR ESKOMSEPUSH:

Your ELAN controller will communicate with the EskomSePush servers on the Internet to obtain the latest information.



INSTALLATION PROCESS

It is recommended that you follow the below installation process to ensure you are running the latest version of the driver.

- 1. Backup your ELAN Controller. This should be done on a regular basis.
- 2. Download the latest version of the driver from DriverCentral.
- 3. Under Input/Output in Configurator, right-click Input Controllers and select Add New Input Controller.



- 4. Select the driver and click OK.
- 5. Enter your ESP Area Name and ESP API Token (License Key)
- Select the Refresh Interval. A Refresh interval of 30 minutes will require a quota of at least 48 requests per day. The free API License has a quota of 50 requests per day. If you select a Refresh Interval of 15 minutes with a free API license, you can expect to stop receiving updates by midday.
- 7. The IP address and Port are not used.

ACCESSING THE ESKOMSEPUSH API

To access the EskomSePush API, a License Key is required. This can be obtained – either free of charge or for a nominal monthly charge – from https://eskomsepush.gumroad.com/l/api

Simply select the package on the right, and "Subscribe". Your email address and name will be required, after which a License Key will be emailed to you. Your License Key has an associated quota of daily requests.

Once you have received your License Key, you will need the area ID for the area. To simplify this process, a simple form has been created to allow easy Area lookups. This form requires v1.0.5 or later of the driver to be installed. https://powerpilot.co.za/services/esp-lookup.html

Enter your Mac Address of your ELAN Controller and Area Name, then select the area ID from the list provided.

Powerp	pilot
This EskomSePush Area look the MAC address of an ELAN up your area ID.	p form is intended for users of the ELAN ESP Driver. The use of this EskomSePush Area lookup form requir controller with the EskomSePush driver installed. This form is provided only as an alternative method to loo
Use of this page is at your ow responsibly and make sure to	risk. We cannot guarantee the accuracy or completeness of the information provided. Please use this tool verify the results before taking any action.
This form has been restruct the EskomSePush Driver v1 of matching EskomSePush	red to prevent abuse. 5 lookups per day are now permitted per ELAN Controller. Your controller will require 0.5 or later. Alternatively, please email info@powerpilot.co.za with your area name, and we will provide a list reas.
ELAN MAC Address	
Area Name	

TEXT INPUTS

The following text data is available from the EskomSePush driver:

- Next Load Shedding Start Time
- Next Load Shedding End Time
- Current Load Shedding Status

The above information may be added to any page as a Text(Feedback) component.





NUMERIC INPUTS

The minutes until the next load shedding is available as a numeric input. It will be 0 during load shedding or indicate the time until the next load shedding starts.

Controller Victron Inverter	Sense Input: Minu	ites until Start
⊿ de ESP 🔴		
dinutes until Start	Name	Minutes until Start
📩 in Progress	Display Name	Minutes until Start
Output Controllers	System ID	7353
SC10 Output Controller		
📟 Serial Devices	Device ID	0
💮 HTTP Devices	State	Off
🔺 🕪 IR Senders		
IR Output 01		

STATE INPUTS

The "In Progress" input can be used to display the current load-shedding status, according to EskomSePush. It can be added to any page as an "Input Toggle Indicator".



Control Properties		×
Туре	Input Toggle Indicator	
Name	Load Shedding in Progress	
Text		
Tx.Size		
Text Align		▼
Control		
Radius		
Raise		
Sink		
Connect To	ESP : In Progress	V
	Delete Control	

TRIGGERING EVENTS

Events can be triggered based on the current load-shedding status and the time until the next load-shedding. Some examples would be:

- Switch off your geyser 10 minutes before load shedding starts.
- Switch your lights geyser on after load shedding.

Triggering an event consists of 2 steps:

Numeric Trigger: New Numeric Trigger		
Name	Load Shedding about to Start	
System ID	7197	
Туре	Trigger if Less Than	7
Trigger when less than	5	
Numeric Input	Minutes until Start	

	Add New Event
System Family	Object
Input Controller Interface Devices Lighting Device Controllers Output Controller System Timers Variables Weather	ESP: In Progress ESP: Minutes until Start Load Shedding about to Start Power Failure SC10 Input Controller: Sense Input 1 SC10 Input Controller: Sense Input 3 SC10 Input Controller: Sense Input 4 Event Numeric Trigger
	Cancel Ok

- 1. Right-click "Numeric Triggers" in the "Input/Output" tab. Select "Add New Numeric Trigger". Give the trigger a meaningful name. Select the value ("Minutes until LoadShedding") and the number of minutes at which to trigger.
- Create an event map on the "Event Mapper" tab. Right-click on "Event Maps" and "Add New Event Map". Give the event map a meaningful name. In the "Events" section, add your trigger from the "Input Controller" section. Select "Numeric Trigger" and "Ok".
- 3. Select the action to take in the "Commands" section.

COMMON PROBLEMS

- EskomSePush may blacklist your IP address if it detects that 2 different API keys have been used from the same network. This normally happens if you change your API key, and will results in a "Free account abuse detected" being displayed. Set the update interval to 60 minutes and should reset within 24 hours. Alternatively, you may be able to reset your internet router to obtain a new public IP address.
- 2. Once you exceed your daily quota, you will not receive updated load-shedding information until the following day.

SUPPORT

For support relating to the installation of the driver or licensing, please log a ticket at <u>https://help.drivercentral.io</u> For technical problems relating to the data provided, please contact:

- Email: <u>support@powerpilot.co.za</u>
- Phone: Paul on +27-82-444-9821

NICE/ELAN DEVELOPER PARTNER INFORMATION

This driver was written and supported by: Paul Cammidge Computer Consulting cc (PCCC).

Disclaimer

Paul Cammidge Computer Consulting cc drivers are created to the highest standard and developed with industryleading practices, including bench and real-world field testing.

Paul Cammidge Computer Consulting cc advises that dealers take advantage of our free show room driver to thoroughly test and familiarize themselves with our drivers and their capabilities before installing them on a customer site.

PAUL CAMMIDGE COMPUTER CONSULTING CC (PCCC) offers dedicated support to help dealers. However, PCCC accepts no liability for any loss, delays, damage or otherwise, whether resulting from the use of their drivers or otherwise. Drivers are provided without warranty with respect to the product they are controlling. PCCC does not guarantee the continuous functionality should the product manufacturer implement a change to their product. We constantly update our drivers to improve functionality and remove any bugs that may arise, with updates being provided at no cost for the listed, supported models in this integration note. Major updates of products may lead to the need to purchase versions of drivers.